## NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## **FACT SHEET**

(pursuant to NAC 445A.236)

**Applicant:** Peri and Son's Farms, Inc.

430 Highway 339

Yerington, Nevada 89447

**Permit**: NEV2007511

**Locations:** Peri and Son's Farms and Peri and Son's Farms

Parcel APN 14-191-06
Parcel APN 14-191-01
Intersection of Farrell Lane and Butte Way
4.100 feet west of Butte Way

Yerington, Lyon County, Nevada 89447

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Latitude: 39° 05' 48" N Latitude: 39° 07' 02" N Longitude: 119° 11' 45" W Longitude: 119° 12' 33" W

Township 14N, Range 25E, Section 9 MDB&M Township 14N, Range 25E, Section 4 MDB&M

**Public Water Supply:** The land application sites are not located within a wellhead capture zone or within 6,000 feet, Drinking Water Protection Area 4, of a public water supply well.

General: The Applicant proposes to continue to land apply domestic septage and portable toilet fluid to a 60-acre site located approximately 2,750 feet south of the intersection of Farrell Lane and Butte Way, Site 1, and to add a 40-acre land application site, Site 2, located approximately 4,100 feet west of Butte Way through this permit. The Applicant has been authorized to land apply domestic septage at Site 1 since July 1, 2007 under Temporary Permit TNEV2007522; land application began August 31, 2007. Site 1 is adjacent to the Allied Sanitation Services, NEV2001500, land application site. Site 2 is also referred to as Peri-McMaster Field #3. All domestic septage and portable toilet fluid beneficially used as a soil amendment and a source of crop nutrients under this permit shall be generated by the Permittee's seasonal and year round farm workers, only.

The Applicant is a licensed septage pumper, LY-17-09108, currently with a 2,000-gallon tank truck. The volume of fluids pumped will vary seasonally depending on the occupancy rate of the labor camp. The greatest flows will be generated during the harvest season.

The 60-acre Site 1 has been subdivided into 30 two-acre sections for better control of the septage application rate. The majority of this site is covered by native vegetation. The Applicant only clears an area estimated to be necessary for land application that month to prevent a dust hazard. The 40-acre Site 2 was recently put into agricultural production and will also be subdivided into sections for better control of the application.

## **Septage Use Requirements:**

- -Domestic septage shall not be applied to land, if the depth to ground water is less than 3 feet.
- -Domestic septage shall not be applied to land within 100 feet of any public roadway or 600 feet from a residence.
- -Domestic septage shall not be applied to land within 200 feet of a drinking water well not defined as a public water system well.
- -Domestic septage shall not be applied within 1,000 feet of a public water system well.
- -Domestic septage shall not be applied within 50 feet of an irrigation well that has been sealed per Nevada Administrative Code (NAC) 534.380.
- -Domestic septage shall not be applied within 200 feet of an irrigation well that is not sealed or cannot be documented as sealed per NAC 534.380.
- -All land application sites shall be fenced and posted with warning signs stating "DOMESTIC SEPTAGE APPLIED, NO TRESPASSING", or similar.
- -Equipment to incorporate the domestic septage into the soil shall be on-site and in operating condition at the time of land application.

- -The domestic septage shall be land applied at a uniform rate by means of a spray bar, splash plate, or similar method approved by the Division.
- -The domestic septage shall be screened through a ½-inch or finer mesh screen to remove solids from the septage prior to land application. Solid material removed from the domestic septage shall be disposed of in an approved landfill.
- -The crop used to determine the annual application rate, Part I.A.4., shall be planted within one-year of the land application of domestic septage. This permit will authorize the Permittee to delay planting the TNEV2007522 land application area for a maximum of six months, within eighteen months of initial land application.
- -Dry land farming is not authorized. The party responsible for the cropping must have irrigation water rights for the site prior to land application of domestic septage.
- -Septage beneficial use shall meet all requirements of 40 CFR Section 503, Standards for the Use or Disposal of Sewage Sludge.
- -Domestic septage shall be incorporated into the soil within 6 hours of being land applied.
- -Domestic septage shall not be applied within 50 feet of any irrigation or drainage ditch, swale, intermittent stream, creek, river, wetland, lake, or other surface water.
- -Food crops shall not be grown on land that has had domestic septage applied within the past five (5) years. (Food crops are crops consumed by humans. These include, but are not limited to, fruit, vegetables, and tobacco.)
- -If the harvested crop yield is less than the crop yield used to determine the agronomic rate, the septage application rate shall be reduced a proportional amount in subsequent years.
- -If commercial nitrogen fertilizer or nitrogen from any other source is applied to this/these field(s), the agronomic rate shall be reduced a proportional amount.
- -If material pumped from portable toilets, holding tanks, or similar devices where the material is unlikely to have been anaerobically digested will be land applied, the application rate shall be one-sixth of the domestic septage application rate.

**Receiving Water Characteristics:** The groundwater at Site 1 is reported by the Applicant to be at a depth of 22 to 25 feet bgs based on on-site excavations. There are no known wells on this property. The DWR Well Log Database lists ten wells in section 9 with static water levels ranging from 4 to 60 feet. The Applicant has reported the groundwater flow direction to be to the north. No water quality data has been provided for this site.

The groundwater at Site 2 is reported by the Applicant to be at a depth of 20 to 25 feet bgs based on nearby excavations. The Applicant has excavated to a depth of 18 feet in an adjacent field and not encountered groundwater. There are no known wells on this property. The DWR Well Log Database lists no wells in section 4. No water quality data has been provided for this site.

**Characteristics:** Only domestic septage and portable toilet fluid may be land applied under this permit. No analysis of the domestic septage or portable toilet fluid is required.

Material pumped from portable toilets, holding tanks, or similar devices where the material is unlikely to have been anaerobically digested shall be applied at one-sixth of the domestic septage land application rate.

The land application of industrial or commercial waste is not authorized by this permit.

**Flow:** The application rate, in gallons of septage per acre per year, shall be based on the amount of nitrogen required by the planned crop and the design crop yield.

gallons/acre = pounds of nitrogen required for crop yield  $\div 0.0026$ 

Example:

A crop nitrogen requirement of 275 pounds per acre per year, irrigated alfalfa with a design yield of 5.5 tons per acre per year, and a monthly average flow of 14,000 gallons of portable toilet fluid, equivalent to 84,000 gallons of domestic septage, would require approximately 9.5 acres per year for land application. The 275 pounds of nitrogen per acre is an estimated value for irrigated alfalfa and may be adjusted based on the recommendation of the Cooperative Extension Service or other cropping expert with local experience regarding crop nitrogen demand and yields or based on the actual crop yield.

In September 2007 and August 31, 2007, the only month reported to date under TNEV2007522, 13,700 gallons of portable toilet and holding tank fluids were pumped. This volume of these fluids is equivalent to 82,200 gallons of domestic septage.

The Applicant has not requested a 30-day average flow or a daily maximum flow. Permits for the land application of domestic septage do not include flow limitations, provided that adequate land is available for application.

**Schedule of Compliance:** The Applicant shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance. The Applicant shall implement and/or execute the following scheduled compliance requirements:

- a. Upon the effective date of this permit, the Applicant shall achieve compliance with the beneficial use limitations.
- b. Within sixty (60) days of the permit effective date, the Applicant shall submit an Operations and Maintenance (O&M) Manual covering the land application and beneficial use of the domestic septage at both sites to the Division for review and approval. The O&M shall include planned cropping practices, agronomic rates, septage application rates and justification for the application rates, delineation of the sites, etc.

**Rationale for Permit Requirements:** Permit requirements are necessary to protect the public health and prevent the land application sites from becoming public nuisances and sources of groundwater pollution.

The crop to be planted and the crop yield of both sites shall be monitored to verify utilization of the applied nitrogen.

Groundwater monitoring is typically not required for agricultural domestic septage beneficial use sites. No groundwater quality monitoring will be required at these sites.

**Proposed Determination:** The Division has made the tentative determination to issue the proposed permit for a period of five (5) years.

**Procedures for Public Comment:** The Notice of the Division's intent to issue a permit, NEV2007511, authorizing the Permittee to land apply domestic septage and portable toilet fluid subject to the conditions contained within the permit, is being sent to the **Mason Valley News** and the **Reno Gazette–Journal** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of publication of the public notice in the newspaper. The date and time by which all written comment must be postmarked or transmitted to the Division via facsimile or e-mail is 5:00 P.M. January 26, 2008. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Prepared by: Bruce Holmgren

December 2007